

AMENDMENTS TO CLAIMS

The following shows amendments to the claims, wherein underlining indicates additions and strikethrough and double brackets indicate deletions. Please cancel claim 1, amend claims 2-4 and insert new claims 7-24, as follows:

1. ~~(Canceled)~~

D₂ 2. (Currently Amended) The elevator apparatus according to claim ~~[[1]]~~7, wherein said actuating device includes a support member, the speed-reducer mounted on a first side of said support member, ~~[[a]]~~the drive assembly mounted on a second side of said support member, ~~and a brake assembly supported on said second side of said support member~~, said second side being opposite from said first side.

3. (Currently Amended) The elevator apparatus according to claim ~~[[2]]~~20, wherein said speed-reducer, said drive assembly and said brake assembly are arranged coaxially to one another.

4. (Currently Amended) The elevator apparatus according to claim ~~[[2]]~~20, wherein said brake assembly is arranged radially inwardly of said drive assembly.

5. (Previously Presented) The elevator apparatus according to claim 2, wherein an output wheel of said speed-reducer constitutes said sheave.

6. (Original) The elevator apparatus according to claim 2, wherein said support member is attached to a floor surface of said machine room.

7. (New) An elevator apparatus comprising:
a cage;
an elevator passage in which said cage is moved ascendingly and descendingly;
a machine room adjacent a top of said elevator passage;
an actuator device including a sheave around which a rope engaged with the cage is wound and a driving section for rotating said sheave having a drive assembly and a speed reducer, wherein said driving section having said speed-reducer is mounted in said machine room so that said sheave is projected into said elevator passage; and

a rotation surface of said sheave is generally perpendicular to an axis of rotation of said sheave and opposed to a side of said cage when said cage is positioned at said top of said elevator passage.

8. (New) The elevator apparatus according to claim 7, wherein said drive assembly includes:

a rotary disc extending radially;

a ring extended from an outer circumference of said rotary disc on an outer surface of which permanent magnets are attached so as to constitute a rotor; and

a stator arranged radially outwardly of said ring.

9. (New) The elevator apparatus according to claim 8, further comprising an encoder arranged at a center of a space formed inside of said ring.

10. (New) The elevator apparatus according to claim 7, wherein said drive assembly includes a rotary disc extending radially, and a rotor being fixed to an outer circumference of said rotary disc; and

said actuating device further includes a support member positioned in facing relationship to a web of said rotary disc.

11. (New) The elevator apparatus of claim 10, wherein said support member rotationally supports said sheave.

12. (New) The elevator apparatus according to claim 10, wherein said support member includes a first support member on which a plurality of columnar parts project, and a second support member fixed to said columnar parts; and

said sheave is rotationally supported by said first support member and said second support member.

13. (New) The elevator apparatus according to claim 7, wherein said speed-reducer is arranged radially inwardly of said sheave.

14. (New) The elevator apparatus according to claim 7, wherein said driving section includes an input shaft;

said speed reducer includes rotary elements, each contacting a circumferential surface of said input shaft such that the rotary elements rotate as said input shaft rotates; and

a cylindrical element having an inner circumferential surface contacting said rotary elements to rotate as said rotary elements rotate.

15. (New) The elevator apparatus according to claim 7, wherein said speed-reducer and said drive assembly are mounted on a single input shaft, so as to be adjacent to each other.

16. (New) The elevator apparatus according to claim 14, wherein said speed-reducer further includes intermediate shafts that rotatably support said rotary elements, respectively, and that are supported by said support member.

D₁ 17. (New) The elevator apparatus according to claim 16, wherein each of said intermediate shafts has axial ends supported by said support member.

18. (New) The elevator apparatus according to claim 12, wherein each of said rotary elements is accommodated in a space defined between said first and second support members.

19. (New) The elevator apparatus according to claim 15, wherein said rotary elements, said cylindrical element and said sheave are arranged on and along the same plane.

20. (New) The elevator apparatus according to claim 7, wherein a brake assembly is provided between an elevator passage side axial end plane of said sheave and a machine room side end plane of said drive assembly.

21. (New) The elevator apparatus according to claim 10, wherein said brake assembly is arranged radially inwardly of said drive assembly.

22. (New) The elevator apparatus according to claim 7, wherein a sectional area of said machine room defined along a horizontal direction is smaller than a sectional area of said machine room defined along a vertical direction perpendicular to the axis of rotation of said sheave.

23. (New) The elevator apparatus according to claim 7, wherein a width of said actuating device is smaller than an outer diameter of said sheave.

24. (New) The elevator apparatus according to claim 7, wherein the machine room is located in a top floor of a building having a ceiling, the ceiling lying substantially in the same plane as an upper limit of said elevator passage.
